

ABSTRACT

[0046] This invention provides a spring loaded mounting mechanism for easily mounting and removing a loudspeaker housing within an opening in a surface. The mounting mechanism includes a shaft connected to the loudspeaker housing. Attached to the shaft is a spring actuated arm. The actuated arm is compressed inward toward the housing by the side walls of the surface surrounding the opening when the housing is being positioned within the opening. At a certain point when the housing is inserted far enough into the opening, the actuated arm will lose contact with the side walls of the surface surrounding the opening and will expand to its open position. In its open position, the arm is positioned just behind or against the back face of the surface surrounding the opening, locking the housing into the opening in the surface. The invention further allows for the spring actuated arm to be tightened against or moved away from the back face of the surface by adjusting the positioning of the shaft. To remove the housing from the opening, the spring actuated arm may be moved away from the back face of the surface surrounding the opening by compressing the arm inward toward the housing. The arm may be compressed inward through the use of a device or by the hand of a user. Once the arm is compressed inward, the housing may be easily removed from the opening.